



early everyone agrees that performance based logistics (PBL) solutions can be effective logistics support vehicles that can improve both readiness and deliver real savings.

So, then why aren't the majority of our weapon systems supported under PBL arrangements? To address this question, let's look to identify the key qualities of successful PBL teams as well as the vital ingredients that go into a successful arrangement.

However, before we address the question of "what's stopping us," we want to step back and give you some background on the basic concepts of PBLs. First, we'll define what a PBL is and just as important, what it is not. Next, we'll discuss the effectiveness of PBL contracts, awarding of a PBL contract, and other PBL challenges you might face. We'll conclude by reviewing the three pillars and three key ingredients that we believe are necessary for successful PBL agreements.

### What Is a PBL?

When addressing the topic of "PBL," the term can mean different things to different people. From a formal definition viewpoint, the Office of the Assistant Secretary of Defense for Logistics and Materiel Readiness (ASD[L&MR]) released the PBL Guidebook: A Guide to Developing Performance-Based Arrangements (https://acc.dau.mil/CommunityBrowser.aspx?id=706778) in May 2014 that defined PBL as follows:

PBL is synonymous with performance-based life cycle product support, where outcomes are acquired through performance-based arrangements that deliver Warfighter requirements and incentivize product support providers to reduce costs through innovation. These arrangements are contracts with industry or intra-governmental agreements.

A PBL arrangement is not synonymous with contractor logistics support (CLS). CLS signifies the "who" of providing support, not the "how" of the business model. CLS is support provided by a contractor, whether the arrangement is structured around Warfighter outcomes with associated incentives or not. PBL arrangements, on the other hand, are tied to Warfighter outcomes and integrate the various product support activities (e.g., supply support, sustaining engineering, maintenance, etc.) of the supply chain with appropriate incentives

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and metrics. In addition, PBL focuses on combining best practices of both government and industry.

Perhaps a more simplistic definition would be: A PBL arrangement buys an affordable outcome that effectively supports the warfighter requirements ... if the agreement is structured correctly.

## PBLs ... the Early Years

The Department of Defense (DoD) involvement with PBL solutions dates back to early 1990s. The early PBL efforts were primarily focused on improving the performance of the logistics processes in order to achieve improvements in weapon system readiness. This readiness would be measured in a variety of metrics that the PBL team deemed reflective of the improvement—and, hopefully, in alignment with the warfighter requirement. While cost wasn't initially a focus of PBLs, there typically was an informal agreement between requirements and budgeting that the PBL arrangement wouldn't cost more than the traditional support plan. In other words, implement

the PBL arrangement at equal or lower cost than traditional support. The long-term PBL arrangement would then allow the upfront costs of the PBL implementation to be amortized over the life of the contract. There are no exotic concepts here, just the old notion that "it takes money to make money."

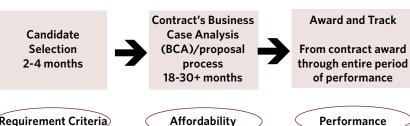
### **PBL Model and Tenets**

While there may be slight differences depending upon who one talks to, a generic PBL model is shown in Figure 1. The PBL "flow" is illustrated by the three sequential boxes running from candidate selection, to business case analysis and proposal, to contract award and subsequent compliance tracking and/ or monitoring. This flow correlates to the acquisition life cycle framework: spend the time and effort to identify and lock in the PBL requirements; conduct an analysis to determine if the PBL approach is affordable (i.e., avoid starting or continuing programs that cannot be produced and supported within reasonable expectations for future budgets); and award the PBL contract with the recognition of the necessity to continually track and monitor the PBL contract award performance in terms of contract compliance evaluated through agreedupon PBL metrics.

### **Have PBL Contracts Been Effective?**

There have been numerous studies and reports on PBLs over the past 15 or more years. Much like fashion styles, the affinity for PBLs has ebbed and flowed during this time. Most recently, there has been a renewed emphasis on PBL solutions. As called out in the most recently released DoD Instruction

Figure 1. The PBL Process



#### Requirement Criteria

- Poor availability
- Low relability
- Obsolescence challenges
- High cost/high demand
- Opportunity to incentivize performancebased outcomes
- Actual sustainment costs exceed life-cycle cost estimates

- Kickoff—Integrated **Product Team formed**
- Statement of Work/Requirements finalization
- Data analysis/concurrence on requirements
- Initial BCA (target) prepared
- Request for Proposal released
- Proposal received final BCA
- Clearances/reviews/ contract award

- **Performance**
- Performance tracking
- Regularly scheduled program reviews
- Cost visibility at renewal time

Source: Modified from July 21, 2015, briefing by the Deputy Assistant Secretary of the Navy for Expeditionary Programs and Logistics Management.

> (DoDI) 5000.02, Operation of the Defense Acquisition System (http://www.acq.osd.mil/fo/docs/500002p.pdf), "The Program Manager will develop and implement an affordable and effective performance-based product support strategy." Note the order of the requirements—affordable and effective.

> This focus on PBLs complements the results of an independent study chartered by the Principal Deputy Assistant Secretary of Defense for Logistics and Materiel Readiness (PDASD[L&MR]) on PBL strategies. The study, Project Proof Point: A Study to Determine the Impact of Performance Based Logistics (PBL) on Life Cycle Costs (https://acc.dau.mil/adl/ en-US/550258/file/68272/Final%20Proof%20Point%20 Narrative%20Report%20(30%20Nov%2011) generally substantiated the PBL approach to DoD's weapon system life cycle support using four tiers of evidence—empirical evidence, statistical point of proof with a defined level of confidence, compelling evidence, and a preponderance of evidence—to arrive at the following conclusion:

PBL arrangements, which adhere to generally recognized PBL tenets, reduce DoD cost per unit of performance while simultaneously driving up the absolute levels of system, subsystem, and major component readiness availability when compared to non-PBL arrangements.

The referenced PBL "tenets" are listed in Figure 2. The thinking is that, as with any complex acquisition and/or sustainment strategy, there are certain desired characteristics necessary

to drive optimal outcomes. For PBL, these characteristics are commonly referred to as the "tenets" of PBL.

Another measure of effectiveness for PBLs can be captured in the writeups submitted for the annual Secretary of Defense Performance-Based Logistics Awards Program. The award writeups read like testimonials to the PBL methodology and provide program managers with a wealth of ideas and best practices they might utilize when developing their own PBL solutions. The list of award recipients and accompanying award citations can be found on the Defense Acquisition University's (DAU) Acquisition Community Connection website under Performance Based Logistics Community of Practice (https://acc.dau.mil/pbl).

### What's So Hard About a PBL Contract?

To recap, we have senior leadership direction to utilize a PBL solution; a plethora of reports and articles that espouse the benefits and advantages of PBL solutions; and an archive of best practices and desk guides to help program managers develop their own PBL solution. It's a slam dunk! Put the proverbial fork in the life-cycle logistics support requirements and deliver a robust PBL solution for your program. Alas, if it were only that easy. As you might expect, there are some challenges in delivering a successful PBL arrangement.

One challenge is to consider where the weapon system is in the acquisition life cycle. If it is too early in the acquisition life cycle, there aren't enough data to develop a PBL arrangement that balances both the risks and opportunities. Too late in the acquisition life cycle and we just don't have enough time to



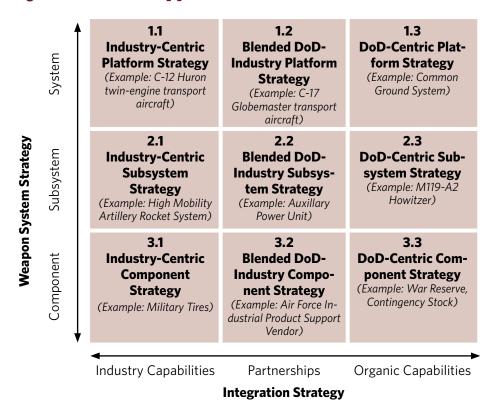
develop and execute a long-term PBL. Then there is that sweet spot where we have some good hard data and have adequate time left in the program to make a PBL contract worthwhile. Combine this last category with a weapon system that is falling short of expectations and you can start zeroing in your best potential PBL candidates. Remember, though: A successful PBL arrangement also needs that enthusiastic provider responsible for delivering a PBL solution within the context of a contractual agreement. If the provider isn't interested in a PBL solution,

Figure 2. The Tenets of Performance Based Logistics

Tenets of PBL	Description
Tenets Tied to Arrangements	<ol> <li>Acquired clearly defined warfighter-relevant outcomes, not just sustainment services or replacement equipment</li> <li>Use measurable and manageable metrics that accurately assess the product support provider's performance against delivery of targeted warfighter outcomes.</li> <li>Provide significant incentives to the support provider that are tied to the achievement of the outcomes (for aspects of performance that are within their control).</li> <li>Firm Fixed Price contracts generally are the preferred contract type (Fixed Price Incentive Firm and Cost Plus Incentive Fee may be effective)</li> <li>Provide sufficient contract length for the product support provider to recoup investments on improved product (e.g., Mean Time Between Failure and sustainment processes; e.g., manufacturing capabilities)</li> </ol>
Tenets Tied to Organization	<ol> <li>Performance Based Logistics (PBL) knowledge and resources are maintained for the government team and product support providers.</li> <li>Leadership champions the effort throughout their organizations(s).</li> <li>Everyone with a vested interest in the outcome is involved.</li> <li>Supply chain activities are aligned to the desired PBL outcome versus disparate internal goals.</li> <li>Risk management is shared between the government, customer, and support provider.</li> </ol>

Source: PBL Guidebook, May 2014.

Figure 3: Product Support Decision Matrix



Source: Defense Acquisition University LOG 340 course material.

then the DoD team is just pushing a rock up a hill. Suffice to say, not all providers have embraced the PBL concept.

# Other Challenges

In some cases, the PBL proposal is noncompliant and doesn't meet Defense Contract Audit Agency (DCAA) audit requirements. Needless to say, this is not a good way to start off your PBL effort. So right up front, the keys are compliant and auditable proposals, and this can only happen with much more emphasis on government-industry communication and a better understanding of the requirement (and the data behind the requirement). Throw in Title 10 implications (the part of the United States Code outlining the role of the Armed Forces), shifting programs, funding uncertainties and—well, you get the idea.

Finally, the biggest challenge of all is forming the right team and building a project plan that complements the targeted weapon system. One of the first steps is determining the scope of the PBL. PBLs come in all shapes and sizes and can cover a range of requirements. DoD has primarily grouped the efforts into three distinct categories: component, subsystem and system-level PBLs. As the names suggest, the categories range from smaller efforts (component) up to the entire weapon system level (system). As you look to expand the size and scope of your effort, expect to face a far more

complex (and lengthy) development effort. The Product Support Decision Matrix (Figure 3) illustrates these points.

Before we leave the challenges, let's take a moment to reflect on something positive. Despite these challenges, there are some very successful PBL efforts in DoD as already noted in the Secretary of Defense's PBL award winners. The Navy has been very effective developing PBL arrangements at the component and subsystem levels. For example, the Naval Supply Systems Weapons System Support (NAVSUP WSS), in conjunction with Naval Air Systems Command (NAVAIR) and Naval Sea Systems Command (NAV-SEA) Program Offices, currently have 36 active PBL arrangements with an annual obligation value of more than \$1.4 billion.

# Potential PBL Provider Understandings

We would be remiss if we didn't at least touch on what the PBL provider needs to appreciate. There is

a great deal for the provider to understand, but by far the most important concept is the need to bring a different approach in providing the logistics support solution. If the proposal is to sell us more spares or to increase the number of field representatives at our sites, then we can pretty much guarantee the proposal will be dead on arrival. There has to be a significant process change that achieves both PBL requirements—"affordable and effective." In short, we're looking for new approaches to long-term sustainment support that avoids such inefficiencies as merely stocking a warehouse full of spare parts gathering dust until needed—think in terms of just-in-time logistics.

#### Three Pillars of a Successful PBL Team

There are many qualities common throughout successful PBL teams, but we identified three components we feel are most important in establishing the PBL team. You can look at it as you do any business agreement that is mutually beneficial to all parties.

1. Long-term agreements. In just about all cases, PBL providers must make upfront investments that will substantially reduce future sustainment costs. It would make no sense for PBL providers to ramp up capacity and/or capability without any guarantees that they will be able to recoup their investments over time. The agreement requires long-term contracts for the provider to amortize these upfront costs over a

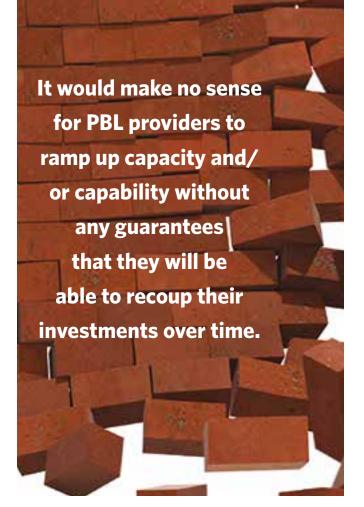
reasonable timeframe. Exactly how long this timeframe will be depends on the PBL.

- **2. Everybody wins.** The PBL provider should expect to make a reasonable profit and the government needs to receive the required performance at an affordable price. The "win-win" concept, while a bit of a cliché, is at the heart of the effort and is aligned to the first pillar of a long-term agreement. After all, a "win-lose" or, even worse, a "lose-lose" effort would never stand the test of time. Some might argue that our business culture drives each side to try to get the very best deal for its team even at the expense of the other side. We would take the counter position that the government and industry professionals recognize the symbiotic relationship they must cultivate over the long term.
- **3. Trust.** There must be trust between the provider and the government. Just like trust in a marriage, trust in a PBL requires time and communication. Given all the challenges a PBL must overcome, it would be impossible for us to overstress communications—and data.

### Three Key Ingredients for Success

So again, we have solid evidence that PBL contracts have made positive impacts on warfighter readiness and that PBLs can provide cost savings. We also recognize that there are obstacles such as time, education and experience, and funding. However, these impediments must be viewed as speed bumps to be overcome and not as roadblocks that turn off the PBL efforts. Here are three key ingredients that should be considered when going forward:

- Senior champions. We could call this one "friends in high places," although some might suggest that these champions are more forceful than the PBL team would like. But as we know, visibility is an effective way to keep projects on the front burners and moving in the right direction. Perhaps it's a little bit of the Hawthorne effect (individuals modify their behavior when they know they are being watched) or the "squeaky wheel" syndrome. No matter, high-level attention and encouragement helps keep the PBL team moving forward and can provide the horsepower to deflect external impediments along the way.
- Focused PBL team. PBL team members often juggle additional tasks during the extended time it takes to deliver a PBL agreement. Distractions such as enterprise resource planning (ERP) implementations, changing operational requirements, and budget reductions are just some of the challenges that the team must work around. This is just another reason to have the support of senior champions.
- A ripe component, subsystem or system. We mentioned that the PBL candidate must be in the right place of its life cycle with a willing partner or partners on the provider side. Again, don't assume your potential PBL provider is well versed on PBL.



## Final Thoughts

Frank Kendall—the Under Secretary of Defense for Acquisition, Technology, and Logistics—has personally campaigned for the PBL cause. The emphasis that he and other senior DoD leadership have given PBL solutions is reflected in recent DoD guidance such as the three iterations of Better Buying Power (http://bbp.dau.mil/) and DoDI 5000.02. Kendall's memo of May 14, 2012, states, "Developing correctly structured, priced, and executed PBLs is often a more complex task than initiating a standard transactional arrangement. It requires a combined and focused effort by the Program Manager, the Product Support Manager, and the Contracting Community, among others. However, the ability to more affordably support the Warfighter at a greater level of readiness is worth the effort."

It's clear that the time is right for the DoD to pursue PBL solutions. The question isn't so much "Why did you develop a PBL" but, rather, "Why didn't you develop a PBL?" The ball is now in the Services' and the Defense Logistics Agency's courts. No doubt it's a tough ball to play. They have to carve out the resources (dedicated teams and funds) required and press forward with the next generation of performance based logistics solutions. It's important that they succeed—our warfighters are counting on them.

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